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Influence of localization zone binding of the high-current discharge to the liquid electrolyte on the formation of a plasma column

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Abstract

Experimentally studied gas discharge between liquid electrolyte cathode and a metal anode in the range of currents 4-21 A. It was revealed that the localization zone binding discharge to the electrolyte increases the length of the plasma column in the vertical direction. Was shown the possibility of formation in the open air space above the liquid electrolyte large-scale plasma column with dimensions in the meter range.

Keywords

Electrolyte cathode, Gas discharge, High-current discharge, Liquid cathode, Long plasma column